SWETA AGRAWAL

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EDUCATION

Ph.D. in Computer Science

August 2018 - Present

University of Maryland, College Park (CGPA: 3.97/4.0)

Advisor: Marine Carpuat

Bachelor of Technology in Computer Science and Engineering

July 2013 - May 2017

Indian Institute of Technology Guwahati (CGPA: 9.30/10.0)

Advisor: Amit Awekar

PUBLICATIONS AND PATENTS

Publications Sweta Agrawal and Marine Carpuat, Controlling Text Complexity in Neural Machine

Translation, EMNLP-IJCNLP 2019.

Sweta Agrawal and Amit Awekar, Deep Learning for Detecting Cyberbullying Across Multiple Social Media Platforms, European Conference on Information Retrieval (ECIR),

2018.

Ankur Garg, Sunav Choudhary, Payal Bajaj, **Sweta Agrawal**, Abhishek Kedia, and Shubham Agarwal, *Smart Geo-Fencing Using Location Sensitive Product Affinity*, **ACM**

SIGSPATIAL, 2017.

Patents Chetan Nanda, Sweta Agrawal, Ramesh P B, Temporal Color Correction using Machine

Learning, USPTO.

Ankur Garg, Sweta Agrawal, Payal Bajaj, Abhishek Kedia, and Shubham Agarwal,

Smart Geo-Fencing Using Location Sensitive Product Affinity, USPTO.

SKILLS

Programming Languages Python, C/C++, R

ML Frameworks Pytorch, Tensorflow, Caffe, Keras, Scikit-Learn, Theano

RELEVANT COURSEWORK

Graduate Courses Computational Linguistics, Visual Learning and Recognition, Numerical Op-

timization, Algorithms in Machine Learning: Guarantees and Analyses, Information Retrieval Systems, Seminar in Computational Linguistics and the

Cognitive Neuroscience of Language

Undergraduate Courses Artificial Intelligence, Natural Language Processing, Computer Vision, In-

formation Retrieval, Probability Theory and Random Processes, Algorithmic

Game Theory, Data Mining

EXPERIENCE

Graduate Research Assistant, Computational Linguistics and Information Processing (CLIP) lab, University of Maryland

June 2019 - December 2019

Member of Technical Staff, Adobe Systems, Noida, India

June 2017 - July 2018

Research Intern, Adobe Systems, Bangalore, India May 2016 - July 2016

Research Intern, Summer Research Fellowship Program, IIT Kanpur May 2015 - July 2015

TEACHING EXPERIENCE

Graduate Courses Artificial Intelligence Planning (Spring 2020)

Undergraduate Courses Natural Language Processing (Fall 2018), Deep Learning (Spring 2019)

PROJECTS

Detecting Linguistic Properties in Contextualized Word Representations (CWRs) via Neural Probing August 2019 - November 2019

Philip Resnik, Department of Computer Science, University of Maryland

Proposed a novel probing task to understand the linguistic knowledge, specifically syntax, semantics and discourse, associated with CWRs by using region-specific priors obtained from fMRI experiments conducted in the brain.

Controlling Text Complexity in Neural Machine Translation

August 2018 - May 2019

Marine Carpuat, Department of Computer Science, University of Maryland

Introduced a machine translation task where the output is aimed at audiences of different levels of target language proficiency and investigated the impact of different types of translation and text simplification supervision for this task.

Deep Memorized Discriminative Patches for Object Discovery

August 2018 - May 2019

Abhinav Shrivastava, Department of Computer Science, University of Maryland

Explaining knowledge representations found in the hidden layers of Deep Neural Network by discovering mid-level patterns and using it for the discovery of new objects.

Detecting Cyberbullying Across Multiple Social Media Platforms

July 2016 - May 2017

Amit Awekar, Department of Computer Science and Engineering, IIT Guwahati

Experimented with DNN architectures that outperform traditional ML models and used knowledge transfer between SMPs to improve performance for the task of bullying detection.

SBQA: Searching Boosting Question Answering

August 2018 - December 2018

 $Jordan\ Boyd\mbox{-}Graber,\ Department\ of\ Computer\ Science,\ University\ of\ Maryland$

Developed a system for Quizbowl, a trivia QA competition, proposed unique solutions for the guesser and the buzzer modules and consistently scored top performance in the leaderboard.

Follow the hashtag: Popping the filter bubble

January 2017 - April 2017

Ashish Anand, Department of Computer Science and Engineering, IIT Guwahati

Studied the problem of filter bubble in Twitter. Used auto-encoders to encode tweets into vector representations which were then clustered to form opinion buckets.